

Remarks

Claims 1 (amended), 2, 3 (amended), 4-5, 6 (amended), 7-8, 9-10 (each amended), 12-17, 18 (amended), 19, 20 (amended) 21-22, 23 (amended) 24-25, 26-27 (each amended), 29-36, 37 (amended), 38 and 39 (allowed). Claims 11 and 28 have been cancelled. Reconsideration of this application in view of the amendments made to the claims and the following remarks is respectfully requested.

Amendments to the Drawings

Figure 1 has been amended to remove reference numeral 328, which was not described in the specification. Figure 5 was amended to include reference to arcuate section 205 and projection area 201. No new matter is added by these amendments. Support for these amendments may be found in paragraph [0030].

New Figures 14, 15, 16 and 17 have been added to provide perspective views of the embodiments illustrated in Figures 5, 7, 8 and 9, respectively. No new matter has been added by these new Figures, which represent perspective views of embodiments that were described in the specification as originally filed. Particular support may be found in Figure 1, which shows a similar perspective view of a prior art drum arrangement. Further, paragraph 6 of the Background states that external drum arrangements typically involve affixing the acceptor sheet to the drum and then securing the donor sheet over *and substantially coextensive with* the acceptor sheet. From this description (that the donor and acceptor elements have similar widths), it is clear that the contact rollers must be sized to accommodate sheets of this width.

Amendments to the Specification

Several paragraphs in the specification were amended to recite that the donor sheet is brought into substantially coextensive contact along the width of the acceptor element. No new matter is being added by these amendments. Support for these amendments may be found throughout the specification. For example, paragraph 6 of the Background section states that external drum arrangements typically involve affixing the acceptor sheet to the

drum and then securing the donor sheet over *and substantially coextensive with* the acceptor sheet. The Background section further reports problems with prior art methods of providing this coextensive contact between the donor and acceptor sheet. It is clear from this description that the present invention is concerned with providing substantially coextensive contact between the donor sheet and the acceptor element. Furthermore, the specification refers to the donor element as a donor *sheet* as opposed to a donor tape, which indicates that the donor element possesses greater width than donor tape. Additional support is implied from the absence of any description of the donor sheet moving relative to the longitudinal axis of the cylinder, and such description would be expected if the donor sheet and acceptor elements did not have comparable widths.

Immediately after paragraph [0029], descriptions of new Figures 14-17 have been added. No new matter is added by these amendments, and support for these amendments is provided above in the "Amendments to Drawings" section.

Paragraph [0031] has been amended to include reference number 308 as it refers to the image-representing rays illustrated in Figure 1. No new matter has been added by this amendment. Paragraph [0034] has been amended to delete reference number 212'.

Paragraph [0035] has been amended to refer to new Figure 14 and to include reference to arcuate section 205 and projection area 201, which are reported in paragraph [0030]. Paragraph [0040] has been amended to include reference to θ' , the angle illustrated in Figure 6.

Paragraphs [0041], [0042] and [0044] have been amended to include reference to Figures 15, 16 and 17, which are discussed in the "Amendments to Drawings" section. Paragraph [0045] has been amended to include a reference number for receptor 304.

Amendments to the Claims

Claims 1, 3, 6, 9, 10, 18, 20, 23, 26, 27 and 37 have been amended to recite that a portion of the donor sheet is brought into substantially coextensive contact with a portion of the acceptor element. Claims 1, 18 and 27 further recite that the substantially coextensive

contact is along the width of the acceptor element. No new matter is added by these amendments, and support may be found, for example, in paragraph 6 and Figures 14-17.

Claims 1, 18 and 27 have further been amended to remove reference to a portion of a donor sheet and a portion of an acceptor element in the preamble. No new matter has been added by this amendment, which clarifies that the donor sheet and acceptor element come into substantially coextensive contact along the width of the acceptor element.

Objections to the Drawings

The drawings were objected to for failing to show every feature of the claimed invention. Specifically, the Office Action stated that the spring-loaded contact rollers, the projection area and the arcuate section must be shown or cancelled from the claims.

Claims 11 and 28, which recite spring-loaded contact rollers, have been cancelled. Figure 5 has been amended to include reference to arcuate section 205 and projection area 201. It is respectfully requested that these objections be withdrawn.

Claim Rejections Under 35 U.S.C. § 102(e)

The Office Action rejected claims 1-6, 9-10, 12-23, 26-27, 29-32, and 35-38 under Section 201(e) as being anticipated by U.S. Patent No. 6,222,567 to Schuster et al. Schuster et al. reports a tape transport mechanism including a supply roll 4 and a rewind roll 5 having associated drives 4a and 5a, two contact rolls 6a and 6b, and two guide rolls 7a and 7b, which lead a tape-like transfer film or tape 8 into contact with a substrate cylinder 1 (col 3, lines 49-58). A laser writing head focuses one or more beams onto the transfer tape 8. Furthermore, as shown in Figure 2, the laser writing head and the tape guide mechanism 4, 4a, 5, 5a, 6 and 7 are jointly arranged on a traversing unit 3 such that they can be moved over the width B of substrate cylinder 1.

Applicants respectfully submit that Schuster et al. does not anticipate the claimed invention. Independent claims 1, 18 and 27 have been amended to recite that a portion of the donor sheet is brought into substantially coextensive contact along the width of a portion of the acceptor sheet. In contrast, Schuster et al. reports a mechanism in which the donor tape

has a substantially narrower width than the substrate cylinder (Figure 2). For this reason, the tape transport mechanism and the laser are mounted on a traversing unit such that image transfer may be provided across the full width of the substrate.

This distinction between Applicants' claimed invention and the invention reported in Schuster et al. is important to the efficiency and effectiveness of the image transfer system. As reported in the present specification, one aspect of successful image transfer is the minimization of relative motion between the donor and acceptor elements. For this reason, one goal of the invention reported in the present specification is to provide synchronous movement between the donor and acceptor elements. By utilizing a donor element that has a substantially similar width as the acceptor element, the traversing movement required by the invention reported in Schuster et al. is eliminated. This results in a more efficient and effective system for image transfer.

Additionally, independent claims 12, 29 and 38 recite that the dispensing and receiving rollers are configured to bring a portion of the donor sheet into contact with a portion of the acceptor element. This configuration is shown, for example, in Figure 7 of the present application, which illustrates an embodiment of the present invention that does not utilize contact rollers to facilitate contact between the donor sheet and the acceptor element. In contrast, the supply roll and rewind roll reported in Schuster et al. are not configured to bring the transfer tape into contact with the substrate cylinder. Instead, guide rolls are required to achieve this contact. Applicants respectfully request withdrawal of this rejection.

Claims Rejection Under 35 U.S.C. § 103(a)

Claims 11 and 28 were rejected under Section 103(a) as being obvious over Schuster et al. in view of Back et al. Claims 11 and 28 have been cancelled. Applicants respectfully request withdrawal of this rejection.

Allowable Subject Matter

Applicants acknowledge that claim 39 has been allowed.


CONCLUSION

All of the pending claims in this application are in condition for allowance. Applicants respectfully request a notice to that effect . If there are any remaining questions, the Examiner is requested to contact John Crimmins at the number listed below.

Respectfully Submitted,

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